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NUNEZ, JORDANY				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/724,950

**Applicant(s)**

WILSON ET AL.

**Examiner**

Jordany Núñez

**Art Unit**

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,7,8,10-13,16,18,19,24,25,27,28 and 30-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,8,10-13,16,18,19,24,25,27,28 and 30-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-649)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Attached.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/22/2008 has been entered.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19, 24, 25, 30-33, 45-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanevsky et al. (US6421453, hereinafter Kanevsky).

As to claim 19, Kanevsky shows:

A method of controlling a computer system using a gesture, comprising:  
permitting different users to select different gestures for execution of a user command on the computer system;  
capturing one aspect of the gesture in the form of a 3-D gesture image (column 32, lines 51-56);  
processing the 3-D gesture image to determine an associated user command preselected by a user to associate with the received gesture (column 7, lines 55-66); and

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and executing the user command to effect manipulation of an object of the computer system based on the selection obtained from profile of the user, wherein the object is a device connected to the computer or an application running on the computer (column 5, lines 10-16) (e.g., because the computer controls access to a door, the door is connected to the computer).

As to claim 24, Kanevsky shows:

The method of claim 19, further comprising controlling the object, which is 3-D image data, by presenting one or more gestures that facilitate (Examiner reads "facilitate" as "not prevent") at least one of rotation about an axis that corresponds to smooth rotation of a user's hand, rotation about a vertex of the 3-D image data, and stepped rotation (column 5, lines 10-16) (Kanevsky teaches performing various commands; since "rotation of data presented [...]" is not taught as being prevented by Kanevsky, it is inherently taught as being "facilitated").

As to claim 25, Kanevsky shows:

The method of claim 19, further comprising controlling the object, which object is associated with at least one of lighting, display intensity, and volume control of an audio signal (column 7, lines 55-66; column 11, lines 30-41; column 6, lines 30-40) (speech biometrics, including speech volume, of a user is associated with controlling an object).

As to claim 30, Kanevsky shows:

A method of controlling a computer system in an operating room environment, comprising:  
calibrating the computer system according to a user profile of individualized gesture data by presenting associated gestures using at least one or more body motions (column 7, lines 48-59);  
mapping the gesture data to at least one user command selected from a plurality of user commands that is executable by the computer system (column 5, lines 10-16);  
invoking the user profile according to a unique signal (column 7, lines 55-66);

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presenting the gestures to a 3-D imaging system for capture and processing (column 7, lines 55-66);

interpreting 3-D renderings of the gestures to retrieve the associated user commands (column 8, lines 9-16);

and executing the user commands to effect manipulation of an object of the computer system (column 8, lines 24-26).

As to claim 31, Kanevsky shows:

The method of claim 30, further comprising automatically including a second user profile of individualized gestures data with the user profile of individualized gesture data with when the associated second user is detected within the operating room environment (column 7, lines 55-66).

As to claim 32, Kanevsky shows:

The method of claim 30, further comprising automatically learning gesture characteristics of a user associated with the user profile, and updating the user profile with the learned gesture characteristics (column 7, lines 63-67).

As to claim 33, Kanevsky shows:

A computer-readable medium having computer-executable instructions for performing a method of controlling a computer using gestures, the method comprising:

receiving gesture calibration data in the form of 3-D images of the gestures (column 7, lines 48-59);

mapping the gesture calibration data to at least one user command that is executable by the computer system (column 5, lines 10-16);

associating the mapped gesture calibration data with a user profile of a user, wherein different users are allowed to select different commands to associate with the received gestured (column 7, lines

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55-66, column 8, lines 59-62) (e.g., different commands requiring different level of security are associated with different gestures);

invoking the user profile according to a unique signal received from the user (column 7, lines 55-66);

processing subsequent 3-D images of the gestures received via a camera system (column 5, lines 26-31);

interpreting the subsequent 3-D images of the gestures to retrieve the associated user commands (column 8, lines 9-16);

and executing the user commands to effect manipulation of a hardware or software object of the computer system (column 8, lines 24-26).

As to claim 52, Kanevsky shows:

The method of claim 19, the associated user command is characterized according to finger usage and hand pose (column 32, lines 51-56).

References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

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subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 5, 10, 27, 28, 34, 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Oohara et al (US5801704, hereinafter Oohara).

As to claim 1

Kanevsky shows a system that facilitates a user interface, comprising:

a user command to control a computer system received from a gesture (column 5, lines 10-16);  
and a 3-D imaging component that captures the gesture in the form of a gesture image, processes the gesture image, and interprets the gesture image to execute the user command for control of the computer system (column 32, lines 51-56), and the imaging component permits different users to select different commands to associate with the received gesture such that the received gesture executes a user command based on user profile (column 7, lines 55-66).

Kanevsky fails to specifically show: wherein control of the computer system comprises controlling computer programs by manipulating on-screen objects.

In the same field of invention three-dimensional gesture recognition, Oohara teaches: a three-dimensional input device. Oohara further teaches: presenting and manipulating 3-D images of system data in response to presenting the gestures (figure 3).

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Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky and Oohara at the time that the invention was made, to have combined the presenting and manipulating 3-D images of system data in response to presenting the gestures of Oohara with the system as taught by Kanevsky.

One would have been motivated to make such combination because a way to enable an image system to accurately process control operation processing of a cursor would have been obtained and desired, as expressly taught by Oohara (column 1, lines 64-67).

As to claim 5, Kanevsky shows:

The system of claim 1, further comprising a voice communication system that receive voice signals that are used singly or in combination with the gesture to control the computer system (column 14, lines 17-24).

As to claim 10, Kanevsky shows:

A computer readable medium having stored thereon computer executable instructions for carrying out the system of claim 1 (abstract).

As to claim 11:

Kanevsky shows a system that facilitates a user interface in a medical environment (column 10, lines 19-22), comprising:

a user command to control an object (e.g., access to a building, or door) of a computer system received as a gesture, wherein the object is a device connected to the computer or an application running on the computer (column 5, lines 10-16; column 8, lines 24-26) (e.g., because the computer controls access to a door, the door is connected to the computer);

a 3-D imaging component that captures the gesture in the form of a gesture image, processes the gesture image, and interprets the gesture image to execute the user command for control of the computer system (column 32, lines 51-56), the imaging component permits user selection of association of gestures



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with user commands wherein different users employ different gestures for execution of a given command, the association being determined during execution by user profile (column 7, lines 55-66).

Kanevsky fails to specifically show: a wireless control device worn by the user, comprising sensors that measure orientation of the device, the orientation information utilized to determine selection of the object, the gesture utilized to control the object of the computer system.

In the same field of invention three-dimensional gesture recognition, Oohara teaches: a wireless control device worn by the user (fig. 12), comprising sensors that measure orientation of the device (fig. 11), the orientation information utilized to determine selection of the object (abstract), the gesture utilized to control the object of the computer system (fig. 1).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky and Oohara at the time that the invention was made, to have combined the wireless control device worn by the user, comprising sensors that measure orientation of the device, the orientation information utilized to determine selection of the object, the gesture utilized to control the object of the computer system of Oohara with the system as taught by Kanevsky.

One would have been motivated to make such combination because a way to enable an image system to accurately process control operation processing of a cursor would have been obtained and desired, as expressly taught by Oohara (column 1, lines 64-67).

As to claim 12, Kanevsky shows:

The system of claim 11, the wireless control device includes a sensor that outputs at least one of a single axis signal and tri-axial signal (column 31, lines 59-65) (means of indicating association is interpreted as a signal).

As to claim 13, Kanevsky shows:

The system of claim 11, the object comprises at least one of hardware and software of the control system (column 5, lines 10-16; column 8, lines 24-26).

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As to claim 16, Kanevsky shows:

The system of claim 11, the gesture includes the use of both hands of an operator to cause execution of the user command (column 22, lines 9-16).

As to claim 18, Kanevsky shows:

The system of claim 11, the wireless control device is used to determine when line of sight of an operator interacts with computer system for control of the object (column 7, lines 19-26).

As to claims 27, 28, 34:

Kanevsky shows a method and computer-readable medium substantially as claimed, as specified above.

Kanevsky fails to specifically show: further comprising identifying the gesture with a user via a radio frequency tag; the tag is attached to a glove worn by the user; further comprising presenting and manipulating 3-D images of system data in response to presenting the gestures.

In the same field of invention three-dimensional gesture recognition, Oohara teaches: a three-dimensional input device. Oohara further teaches: further comprising identifying the gesture with a user via a radio frequency tag (e.g., position transmitters) (column 4, lines 19-26); the tag is attached to a glove worn by the user (column 4, lines 19-26); further comprising presenting and manipulating 3-D images of system data in response to presenting the gestures (figure 3).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky and Oohara at the time that the invention was made, to have combined the further comprising identifying the gesture with a user via a radio frequency tag; the tag is attached to a glove worn by the user; further comprising presenting and manipulating 3-D images of system data in response to presenting the gestures of Oohara with the method and computer-readable medium as taught by Kanevsky.

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One would have been motivated to make such combination because a way to enable an image system to accurately process control operation processing of a cursor would have been obtained and desired, as expressly taught by Oohara (column 1, lines 64-67).

As to claim 39, Kanevsky shows:

The system of claim 1, the 3-D imaging component captures a gesture formed by using at least one hand (column 32, lines 51-56).

As to claim 40, Kanevsky shows:

The system of claim 1, the 3-D imaging component captures a gesture formed using a head movement (column 32, lines 51-56).

As to claim 41, Kanevsky shows:

The system of claim 1, the 3-D imaging component initiates a confirmation request signal in response to receiving the gesture (column 15, lines 48-53).

As to claim 42, Kanevsky shows:

The system of claim 1, the 3-D imaging component detects gesture characteristics in the captured gesture, which gesture characteristics include at least one of hand movement, finger count, finger orientation, hand orientation, and hand rotation (column 32, lines 51-56).

As to claim 43, Kanevsky shows:

The system of claim 1, the 3-D imaging component continually monitors location of a given user bearing a tag via a triangulation system, and associates the location data with captured image data such that gestures from that location will be processed against associated user profile to properly execute the user command (column 7, lines 19-27) (e.g., the camera reads the identification information on a users

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card, and triangulates the information with behavioral passwords and other recognition means to arrive at a determination that a user is authorized or not).

As to claim 44, Kanevsky shows:

The system of claim 1, the 3-D imaging component controls windows in the computer system based on dwell time of the received gesture wherein dwell time is a time after having engaged the computer system, that the user holds their hand position stationary such that a system icon remains over a particular window (column 23, lines 3-7).

As to claim 45, Kanevsky shows:

The system of claim 11, the 3-D imaging component utilizes the captured gesture to facilitate (Examiner reads "facilitate" as "not prevent") rotation of data presented by the computer system about at least one of an axis and a vertex of the data (column 5, lines 10-16) (Kanevsky teaches performing various commands; since "rotation of data presented [...]" is not taught as being prevented by Kanevsky, it is inherently taught as being "facilitated").

As to claim 46, Kanevsky shows:

The system of claim 11, the 3-D imaging component utilizes the captured gesture to manipulate image data presented by the computer system, which manipulation of data includes at least one axis translation, zoom control, and paging through multiple images of the image data (e.g., frames) (column 23, lines 3-7).

As to claim 47, Kanevsky shows:

The system of claim 11, the 3-D imaging component associates the captured gesture with a unique user (column 11, line 65 to column 12, line 4).

As to claim 48, Kanevsky shows:

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The system of claim 11, the 3-D imaging component further comprising processing subsequent gesture images to interpret the gesture for manipulation of the object (column 1, line 63 to column 2, line 5).

As to claim 49, Kanevsky shows:

The system of claim 11, the 3-D imaging component further comprising presenting the gesture as at least one of a hand manipulation, a gaze signal, or a vocalization, to control the object (column 32, lines 51-56; column 10, lines 63-67).

As to claim 50, Kanevsky shows:

The system of claim 11, the 3-D imaging component automatically changes user profiles when a user programmed to interact therewith has been replaced by a second user (column 30, lines 50-59).

As to claim 51, Kanevsky shows:

the 3-D imaging component utilizing the captured gesture to facilitate (e.g., not prevent) rotation of data presented by the computer system about at least one of an axis and a vertex of the data, and the controlled object is associated with video data and the 3D imaging component executes the user command to at least one of start, stop, freeze or loop the video data (column 5, lines 10-16) (Kanevsky teaches performing various commands; since "rotation of data presented [...]" is not taught as being prevented by Kanevsky, it is inherently taught as being "facilitated").

Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Hildreth et al (US7227526, hereinafter Hildreth).

As to claim 35, Kanevsky shows:

Kanevsky shows a method substantially as claimed, as specified above.

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Kanevsky further shows: processing one or more of the gestures presented within the volume of space to effect control of the computer (column 5, lines 10-16), and a database storing a user's medical history information (column 12, lines 55-61).

Kanevsky fails to specifically show: further comprising defining a volume of space over a patient on an operating table, and processing one or more of the gestures presented within the volume of space to effect control of the computer before, during, or after an operating procedure on the patient.

In the same field of invention, Hildreth teaches: a video-based image control system. Hildreth further teaches: defining a volume of space over a user (e.g., user's head) (column 14, lines 30-37).

It was well known at the time of the instant invention that a user could be a patient, and that a computer could be used before, during, or after an operating procedure on the patient.

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky and Hildreth at the time that the invention was made, to have combined the defining a volume of space over a user of Hildreth and the well-known a user being a patient, and a computer being used before, during, or after an operating procedure on the patient with the method as taught by Kanevsky.

One would have been motivated to make such combination because a way to enable access to a computer when impractical to use a computer mouse or track ball would have been obtained and desired, as expressly taught by Hildreth (column 1, lines 34-38).

As to claims 36-38:

Kanevsky shows a system for controlling a computer during a medical procedure using one or more hand gestures of a person, comprising:

means for capturing a gesture presented by a person (column 5, lines 10-16), in the form of a 3-D image (column 5, lines 26-31);

means for processing the 3-D image of the gesture to allow recognition thereof (column 5, lines 10-16);

means for returning a computer command associated with the recognized gesture (column 5, lines 10-16), wherein different commands are returned associated with different users for the received

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gesture (column 7, lines 55-66, column 8, lines 59-62) (e.g., different commands requiring different level of security are associated with different gestures);

and means for executing the computer command to facilitate (e.g., not prevent) manipulation of medical information presented on a display to the medical person (column 5, lines 10-16), further comprising means for confirming use of the computer command with the recognized gesture (column 8, lines 6-16), the gesture includes means for generating an audio signal in the form of at least one of vocalizations and clicking (column 7, lines 55-66; column 11, lines 30-41; column 6, lines 30-40) (speech biometrics, including speech volume, of a user is associated with controlling an object).

Kanevsky fails to specifically show: said person being a medical person.

It would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky at the time that the invention was made, to have included said person being a medical person with the system as taught by Kanevsky.

One would have been motivated to make such combination because a way to enable access to a computer when impractical to use a computer mouse or track ball would have been obtained and desired, as expressly taught by Hildreth (column 1, lines 34-38).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Oohara, further in view of Kazama et al. (US6111580, hereinafter Kazama).

As to claim 7:

Kanevsky and Oohara show a system substantially as claimed, as specified above.

Kanevsky and Oohara fail to specifically show: determining when an operator is looking in the direction of the computer system.

In the same field of invention enabling a user to operate equipment using gesture input (column 1, lines 5-10), Kazama teaches: an apparatus and method for controlling an electronic device. Kazama

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further teaches: controlling an apparatus according to the user's gaze of sight and gesture directed to the center point of a display (column 3, lines 60-67).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky, Oohara and Kazama at the time that the invention was made, to have combined the controlling an apparatus according to the user's gaze of sight and gesture directed to the center point of a display of Kazama with the system as taught by Kanevsky and Oohara.

One would have been motivated to make such combination because a way to activate equipment simply by a simple action of a user would have been obtained and desired, as expressly taught by Kazama (column 2, lines 10-13).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Oohara, further in view of Dempski et al (US7007236, hereinafter Dempski).

As to claim 8:

Kanevsky and Oohara show a system substantially as claimed, as specified above.

Kanevsky and Oohara fail to specifically show: the 3-D imaging component is distributed across the computer system and at least one other computer system.

In the same field of invention, Dempski teaches: a lab window collaboration system. Dempski further teaches: a 3-D imaging system that is distributed (figure 1).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Kanevsky, Oohara and Dempski at the time that the invention was made, to have combined the 3-D imaging system that is distributed of Dempski with the system as taught by Kanevsky and Oohara.

One would have been motivated to make such combination because a way to enable merging of video conferencing and three-dimensional computer applications would have been obtained and desired, as expressly taught by Dempski (column 1, lines 46-50).



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References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.

### ***Response to Arguments***

Applicant's arguments have been fully considered but are not persuasive. Examiner reiterates that references to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention. Applicant argues that:

#### I. Rejection of Claims 11-13, 16, 18, 19, 24, 25, 30-33 and 45-52 Under 35 U.S.C.

##### §102(b)

1) Kanevsky et al. relates to a method and apparatus for user recognition to grant access to authorized users to one of a computer, a service and a facility. At the cited portions, Kanevsky et al. discloses processing the same command from multiple users, wherein the command has a different meaning to each of the users. The system disclosed by Kanevsky et al. films the gestures of an individual, matches it against a users pin database and verifies if the gesture matches the stored gesture. The result of this verification is applied to a grant/deny entry system that operates the door. Nowhere does Kanevsky et al. disclose the imaging component permits user selection of association of gestures with user commands. Rather, the system associates a gesture pin from a user with a user command of opening the door, and associates gesture pins from different users with a user command of opening the door. This is not permits user selection of association as any user selected gesture can be associated only with a single user command, of allowing access to a facility. In contrast, the claimed invention allows for user selection of associating a plurality of gestures with a plurality of user commands. Thus, Kanevsky et al. is silent regarding the imaging component permits' user selection of association of gestures with user commands' as recited by independent claim 11 (page 11, penultimate paragraph).

Examiner disagrees.

Applicant clearly errs when stating "Kanevsky et al. discloses processing the same command from multiple users." Kanevsky (col. 4, l. 63 to col. 5, l. 2) clearly discloses identifying and verifying a user

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prior to performing an act (e.g., access to a facility) or providing said user with an object (e.g., a paycheck). Thus, Kanevsky clearly teaches performing different commands (e.g., provide access to a facility or provide a paycheck) to different users. Applicant also errs when alleging that Kanevsky does not disclose the imaging component permitting user selection of association of gestures with user commands. As acknowledged by Applicant, Kanevsky films the gestures of an individual, matches it against a users pin database and verifies if the gesture matches a stored gesture. Kanevsky (abstract; col. 7, l. 63-66) teaches that the stored gestures are user selected and pre-stored during an enrollment session. As explained above, this match results on a computer performing an act or providing a product. Thus, Kanevsky clearly teaches an imaging component permitting (e.g., filming) user selection of association of gestures (e.g., user selected pre-stored pin gestures that are later matched) with user commands (e.g., providing a service or product).

2) At the cited portions, Kanevsky et al. discloses a gesture pin that consists of a gesture in which the user displays a proof of possession such as an ID card. Nowhere does Kanevsky et al. disclose a wireless control device worn by the user, comprising sensors that measure orientation of the device, the orientation information utilized to determine selection of the object, the gesture utilized to control the object of the computer system. Rather, the ID card is only used as part of the gesture pin that verifies the identity of the user. In contrast, the claimed invention discloses a wireless device worn by the user, the device comprises sensors that transmits orientation signals to a receiver in the computer, the orientation of the device is used to determine if the device is being pointed at an object in the operating room environment that is controllable by the computer system, which information determines the object is selected and the gestures of the user are utilized to control the selected object. Thus, Kanevsky et al. is silent regarding a wireless control device worn by the user, comprising sensors' that measure orientation of the device, the orientation information utilized to determine selection of the object, the gesture utilized to control the object of the computer system as recited by independent claim 11 (page 11, last paragraph).

Examiner agrees.

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A new rejection is provided.

3) Amended independent claim 19 recites permitting different users to select different gestures, for execution of a user command selected from a plurality of commands on the computer system. Independent claim 30 recites similar features a independent claim 19, namely mapping the gesture data to at least one user command selected from a plurality of user commands that is executable by the computer system. Nowhere does Kanevsky et al. disclose such novel features. At the cited portions, Kanevsky et al. provides for gestures of different users captured in an enrolment session, and stored in a database. The gestures are utilized to recognize the individual, wherein on recognition the user is allowed access to a computer/facility/service. However, Kanevsky et al. does not provide for letting a user select a command from a plurality of commands and map it with a previously captured gesture, and hence is silent regarding permitting different users to select different gestures, for execution of a user command selected from a plurality of commands on the computer system as recited by independent claim 19 (page 12, penultimate paragraph).

Examiner disagrees.

As stated above, Kanevsky (col. 4, l. 63 to col. 5, l. 2) clearly teaches performing different commands (e.g., provide access to a facility or provide a paycheck) to different users. As acknowledged by Applicant, Kanevsky films the gestures of an individual, matches it against a users pin database and verifies if the gesture matches a stored gesture. Kanevsky (abstract; col. 7, l. 63-66) teaches that the stored gestures are user selected and pre-stored during an enrollment session. As explained above, this match results on a computer performing an act or providing a product. Thus, Kanevsky clearly teaches an imaging component permitting (e.g., filming) user selection of association of gestures (e.g., user selected pre-stored pin gestures that are later matched) with user commands (e.g., providing a service or product).

4) Independent claim 33 recites mapping the gesture calibration data to at least one user command that is executable by the computer system; associating the mapped gesture calibration data with a user profile of a user, wherein different users are allowed to select different commands to associate

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with the received gesture. Kanevsky et al. is silent regarding such novel features. At the cited portions, Kanevsky et al. provides for gestures of different users captured in an enrolment session, and stored in a database. The gestures are utilized to recognize the individual, wherein on recognition the user is allowed access to a computer/facility/service. Nowhere does Kanevsky et al. disclose different users are allowed to select different commands to associate with the received gesture. Rather, different users are allowed to select different gesture pins that are associated with a single user command of opening a door. Thus, Kanevsky et al. is silent regarding the aforementioned features recited by independent claim 33 (page 12, last paragraph).

Examiner disagrees.

As stated above, Kanevsky clearly teaches performing different commands (e.g., provide access to a facility or provide a paycheck) to different users. Further, Kanevsky (abstract; col. 7, l. 63-66) teaches that the stored gestures are user selected and pre-stored during an enrollment session. Moreover, Kanevsky (col. 6, l. 57-67) teaches storing biometric features that are measured during the enrollment period in a user profile. Thus, Kanevsky clearly teaches mapping the gesture calibration data to at least one user command (e.g., creating a gesture that is stored and associating it with a provided service or product) that is executable by the computer system; associating the mapped gesture calibration data with a user profile of a user (e.g., storing the gesture data in a user profile), wherein different users are allowed to select different commands to associate with the received gesture (e.g., different users are able to create their own gestures and that are stored and associated with a provided service or product).

5) Dependent claim 48 recites the 3-D imaging component further comprising processing subsequent gesture images to interpret the gesture for manipulation of the object. At the cited portions, Kanevsky et al. discloses multiple users giving a command to the computer, the user recognition system recognizes the users and their rankings and the command given by the higher ranking user being executed. Thus, Kanevsky et al. discloses the user recognition feature of the system. Nowhere does Kanevsky et al. disclose the 3-D imaging component further comprising processing subsequent gesture images to interpret the gesture for manipulation of the object. In contrast, the claimed invention provides a

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wireless device selecting an object for manipulation, the imaging component to process subsequent gesture images from the user, interpret the gestures and accordingly manipulate the object. Thus, Kanevsky et al. is silent regarding aforementioned features recited by claim 48 (page 13, paragraph starting with "Dependent claim 48 [...]").

Examiner disagrees.

As to the limitation involving the wireless device, it is the Oohara that is relied upon for the rejection of said limitation, not Kanevsky. See rejection of claim 11. Further, Kanevsky clearly teaches the imaging component to process subsequent gesture images from the user (e.g., commands given by the higher ranking user being executed first, as acknowledged by Applicant), interpret the gestures (e.g., filmed gestures of an individual, as acknowledged by Applicant) and accordingly manipulate the object (e.g., provide a service or product, see, Kanevsky, col. 4, l. 63 to col. 5, l. 2)

II. Rejection of Claims 1, 5, 10, 27, 28, 34, 39-44 Under 35 U.S.C. §103(a)

6) Kanevsky et al. relates to a method and apparatus for user recognition to grant access to authorized users to one of a computer, a service and a facility. At the cited portions, Kanevsky et al. discloses performing a user verification by filming the gestures of an individual, matching it against a users pin database and verifying if the gesture matches the stored gesture. The result of this verification is applied to a grant/deny entry system that operates the door. Nowhere does Kanevsky et al. disclose the imaging component permits different users to select different commands to associate with the received gesture such that the received gesture executes a user command based on user profile. Rather, gesture pins of users are captured and compared to gesture pins in a storage of a user verification system, on a match occurring the user is allowed access to a facility. In contrast, the claimed invention provides for a plurality of user commands from which a user can select a command to map a particular gesture pin, select another command for a second gesture pin etc. Further, the claimed invention allows different users to map their individual gesture pins to the same selected command (page 14, paragraph starting with "Kanevsky et al. relates [...]").

Examiner disagrees.

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Kanevsky (col. 4, l. 63 to col. 5, l. 2) clearly teaches performing different commands (e.g., provide access to a facility or provide a paycheck) to different users, thus Applicant, when stating that "the system that operates the door," seemingly miscomprehends all that Kanovsky teaches. Further, Kanevsky (col. 6, l. 57-67) teaches storing biometric features that are measured during the enrollment period in a user profile. Thus, Kanovsky clearly teaches the imaging component (e.g., filming apparatus, as acknowledged by Applicant) permits different users (e.g., as acknowledged by Applicant) to select different commands (e.g., provide a service or product) to associate with the received gesture (e.g., filmed gesture, as acknowledged by Applicant) such that the received gesture executes a user command (e.g., provides the service or product) based on user profile (e.g., the user profile stores user biometrics that are matched against the filmed gesture).

7) Oohara et al. relates to a method of image processing for processing an object by detecting movement of hands and fingers of an operator. At the cited portions, Oohara et al. discloses an operator selecting functions by performing the gesture that corresponds to the function, displayed in an instruction action form. However, Oohara et al. is silent regarding the imaging component permits different users to select different commands to associate with the received gesture such that the received gesture executes a user command based on user profile as recited by independent claim 1 (page 14, antepenultimate paragraph).

Examiner disagrees.

Oohara is not relied upon for the teaching of the limitation in question. Instead, Kanevsky is used. As stated above, Kanevsky (col. 4, l. 63 to col. 5, l. 2) clearly teaches performing different commands (e.g., provide access to a facility or provide a paycheck) to different users. Further, Kanevsky (col. 6, l. 57-67) teaches storing biometric features that are measured during the enrollment period in a user profile. Thus, Kanovsky clearly teaches the imaging component (e.g., filming apparatus, as acknowledged by Applicant) permits different users (e.g., as acknowledged by Applicant) to select different commands (e.g., provide a service or product) to associate with the received gesture (e.g., filmed gesture, as acknowledged by Applicant) such that the received gesture executes a user command (e.g., providing the

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service or product) based on user profile (e.g., the user profile stores user biometrics that are matched against the filmed gesture).

III. Rejection of Claims 35-38 Under 35 U.S.C. §103(a)

8) Applicant makes the similar arguments to the ones for claim 33. See item 4) and its response above.

IV. Rejection of Claim 7 Under 35 U.S.C. §103(a)

9) Applicant makes the similar arguments to the ones for claim 1. See items 6) and 7) and corresponding responses above.

V. Rejection of Claim 8 Under 35 U.S.C. §103(a)

10) Applicant makes the similar arguments to the ones for claim 1. See items 6) and 7) and corresponding responses above.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Oh [U.S. 5616078]

Maggioni [U.S. 5828779]

Platzker et al. [U.S. 5528263]

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordany Núñez whose telephone number is (571)272-2753. The examiner can normally be reached on Monday Through Thursday 9am-7:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571) 272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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JN

10/30/2008

/WILLIAM L. BASHORE/  
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